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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/094,052	06/09/1998	PETER W.J. JONES	47513	7937
21874	7590	05/04/2005		
EDWARDS & ANGELL, LLP P.O. BOX 55874 BOSTON, MA 02205			EXAMINER NGUYEN, THONG Q	
			ART UNIT 2872	PAPER NUMBER

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/094,052

Applicant(s)

PETER W.J. JONES

Examiner

Thong Q. Nguyen

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,7 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) 1, 4-5, 7, 11 and 13-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The present Office action is made in response to the amendment of 2/14/2005. It is noted that in the mentioned amendment, applicant has made changes to claims 1, 13 and 14.

Claim Objections

2. The objections to claims 1, 13 and 14 as set forth in the previous Office action are now withdrawn due to the amendments to the claims.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 4-5, 7, 11 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones in view of Softly (both of record).

Jones discloses an apparatus for use with an optical device such as a binocular device, a telescope, a periscope, a riflescope, a night vision device or the like (see column 1). The apparatus disclosed by Jones is an improvement of the conventional art in which Jones teaches the use of a set of concentric circular vanes disposed in front of a lens surface of a lens assembly located within an optical device for the purpose of reducing the reflection of light incident on the lens reflecting surface of the lens assembly while still maintaining a substantially field of view for a user who makes an observation via the light passed through the vanes and the lens assembly (see column 2, for example). Each of the

circular vanes has a first end disposed near the lens reflecting surface, and a second end disposed away from the first end. It is also noted that a combination of concentric circular vanes and radial vanes is disclosed by Jones as can be seen at column 5 and shown in fig. 9. While Jones does not clearly state the apparatus is mounted on a field goggle; however, such a feature is inherent from the Jones' teaching because at column 1 he states that the apparatus can be used by a person of a battlefield troop in a night time in the form of a night vision device. See Jones, columns 1 and 3-4 and figs. 1 and 8-9, for example. Jones also teaches that his optical apparatus has a length-to-width ratio which is equal to or different from the length-to-width ratio of the field of view (see columns 2-4, claims 1 and 13, for example).

Thus, the arrangement of a set of vanes disposed in front of a lens surface having a curved shape of an optical device for reduction light reflections incident on the lens surface so that the light reflected from such lens surface is essentially not viewable by an observer located distal from the second ends of the vanes and so that a user viewing through the lens assembly can observe the image corresponding to the wide field of view of the lens assembly. The only feature missing from the Jones reference is that he does not clearly teach that the first ends of the concentric circular vanes are spaced further apart from each other at a different distance than the second ends of the concentric circular vanes are spaced apart from each other as claimed in the present claims 1 and 15.

Regarding to the arrangement of the vanes in front of an optical element, in another embodiment disclosed in column 5 and shown in figure 10, Jones has suggested that the vanes are arranged in a non-parallel manner and in inclined angles different from 90 degrees with respect to the lens reflecting surface of an optical device. As a result of such an arrangement, the distance between two adjacent first ends of the vanes which ends located closer to the optical element is different from the distance defined between two adjacent second ends of the vanes located further from the optical element. While in the embodiment provided at column 5, John discloses the use of the inclined vanes in front of device having non-magnification feature such as a mirror or windshield; however, the inclined vanes are also used in front of other optical device having magnification as stated by John in column 6, lines 9-15 thereof "Structures in accordance with the inventions can be...the like." See also column 1.

Regarding to the feature that the first ends of the vanes are further spaced from each other than the second ends of the vanes are spaced apart as claimed in claim 1, it is noted that such an arrangement of the vanes as claimed is merely that of a preferred embodiment and no criticality has been disclosed. The support for this conclusion is found in the present specification in which it suggests a variation of arrangements of the vanes. In one variation of arrangement of the vanes, the distance between two adjacent first ends is smaller than the distance between two adjacent second ends. See specification at pages 5-6 and figs. 6-7 and 10-11, for example

Further, it is noted that the use of an array of vanes disposed in front of a lens surface having a curved shape for the purpose of reduction light reflections incident on the lens surface wherein the distance between two adjacent first ends near the lens surface of vanes is larger than the distance between two adjacent second ends farther from the lens surface of the vanes for the purpose of reduction the light reflection incident on the lens surface is suggested to one skilled in the art as can be seen in the system provided by Softy. In particular, Softy discloses the use of an array of vanes (21) in front of a curved screen (11) and teaches that the vanes are arranged in a manner that the first ends near the curved screen of the vanes is spaced further apart from each other at a different distance than the second ends disposed farther from the curved screen of the vanes are spaced apart from each other. See columns 2-3 and figs. 2-4, in particular, at column 2, lines 52-57 which states: "In a television studio most of the ambient light falls towards the monitor screen from an upward direction rather from the side, and so the horizontally extending slats 21 are suitably positioned to intercept this light which would otherwise be reflected from the screen and impair the quality of the image."

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the apparatus having vanes disposed in front of a lens reflecting surface of an optical device as provided by Jones (column 5, lines 10-34) by rearranging the orientation of the vanes so that the distance between two adjacent first ends of the vanes is different from the distance defined

between two adjacent second ends of the vanes and the distance between two adjacent first ends near the lens surface of vanes is larger than the distance between two adjacent second ends farther from the lens surface of the vanes as suggested by Softy for the purpose of reducing the light reflection while still maintaining the wide field of view of the optical device.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones in view of Softy as applied to claim 1 above, and further in view of Brennan (of record).

The combined product provided by Jones and Softy does not clearly disclose that the lens has a field of view of at least 40 degrees; however, a binocular device having a field of view of 60 degrees is known to one skilled in the art as can be seen in the binocular device provided by Brennan (see column 3 and fig. 5).

Thus, it would have been obvious to one skilled in the art at the time the invention was made to use of the anti-reflection with non-parallel vanes as provided by Jones and Softy in a binocular device having a wide field of view such as the binocular provided by Brennan for the purpose of reducing reflections of light incident on a lens surface located behind the mentioned vanes in a binocular or telescope or goggles and simultaneously providing a wide field of view of at least 40 degrees for the user of such device.

Response to Arguments

6. Regard to the rejection of claims under 35 USC 103(a) over the art of Jones and Softy, applicant arguments provided in the amendment of 2/14/2005, pages 9-15, have

been fully considered but they are not persuasive. The examiner respectfully disagrees with the applicant's opinions for the following reasons.

First, applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Second, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The present claims are rejected by a combination of the teachings provided by Jones and Softy wherein the art of John contains almost features recited in the present claim except the orientation of the vanes, and the art of Softly discloses the use of a plurality of slats located in front of an optical lens having a curved lens surface which slabs are adjustable in their orientation for the purpose of reducing the light reflection. One skilled in the art will modify the orientation of the vanes in the system of Jones by the suggestion provided by Softly because

a) Jones discloses that the orientation of the vanes is changeable. In other words, it is the examiner's opinion that *the invention is directed to the arrangement/orientation of the vanes in an inclined manner or non-parallel manner. The difference in space/distance between two adjacent vanes in the first*

*ends and that of the two mentioned vanes in the second ends is not important at all because the specification clearly discloses two embodiments in which one embodiment discloses that the space between two adjacent vanes at the first ends is **larger than** the space between the two mentioned vanes at the second ends, and the other embodiment discloses that the space between two adjacent vanes at the first ends is **smaller than** the space between the two mentioned vanes at the second ends.*

b) Softly discloses that the slabs are oriented so that the first ends of the slabs near the lens surfaces are spaced further apart from each other at a different distance than the second ends of the slabs disposed farther from the curved lens surface are spaced apart from each other.

Third, In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

First, the applicant is respectfully invited to review the art of John in column 5, lines 35+ in which John clearly teaches: "The tubular...used. In some applications, it may be desirable to arrange them so that they are at other than a

90° angle with respect to the reflective surface in question.” . To support for the teaching, John disclosed one example in which the vanes are arranged/oriented in a non-parallel manner in which the angle defined between a particular vane and the lens surface is different from 90 degrees as can be seen in the embodiment disclosed in column 5, lines 41+ and shown in fig. 10.

Second, while John discloses just one example concerning the arrangement/orientation of the vanes in which the spaces between two adjacent vanes at the first ends is larger than the space between the two mentioned vanes at the second ends; however, ***there is not any reason stated by John for not arrangement/orientation of the vanes so that the space between two adjacent vanes at the first ends is smaller than the space between the two mentioned vanes at the second ends.*** Accordingly, it would appear that one skilled in the art would have recognized that the orientation of the vanes so that the space between two adjacent vanes in the first ends is larger than the space between two adjacent vanes in the second ends and the orientation of the vanes so that the space between two adjacent vanes in the first ends is smaller than the space between two adjacent vanes in the second ends would have been equally obvious.

Third, Softly discloses a system positioned in front of a curved optical reflecting surface and teaches the slabs formed the system be adjustable in their orientation for the purpose of controlling the disadvantage of the light reflection. While the observer is located in front of the lens and the system; however, the

examiner has not suggested to tried to bodily incorporate the two structures into one. The feature of variable orientation of slabs disposed in front of a reflecting surface provided by Softly is the suggestion which one skilled in the art will utilize to modify/improve the system of Jones for the purpose of increasing the ability of reduction of light refraction. Applicant should note that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

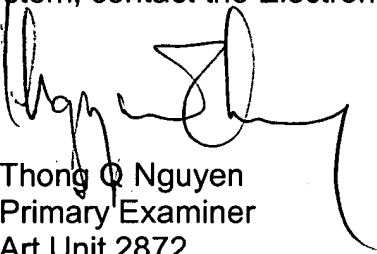
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2872

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A. Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thong Q. Nguyen
Primary Examiner
Art Unit 2872
